BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **February 2004**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy

P-1 ITEM NOMENCLATURE
Tomahawk (MYP)

Program Element for Code B Items:
BA2/Other Missiles **P.E. #0204229N**

Other Related Program Elements

	Prior Years	ID Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY	4,226	B	350	350	293	419	434	485	424		6,981
Gross P-1 Cost ($M)	$8,012.851		$437.054	$302.645	$265.178	$359.372	$390.435	$454.786	$427.010	$0.000	$10,649.331
EOQ Credit					-$8.982	-$12.845	-$13.305	-$14.868			-$50.000
Net P-1 Cost ($M)	$8,012.851		$437.054	$302.645	$256.196	$346.527	$377.130	$439.918	$427.010	$0.000	$10,599.331
Adv Proc/EOQ ($M)				$50.000							$50.000
Wpn Sys Cost ($M)	$8,012.851		$437.054	$352.645	$256.196	$346.527	$377.130	$439.918	$427.010	$0.000	$10,649.331
Initial Spares ($M)	$313.518										$313.518
Proc Cost ($M)	$8,326.369		$437.054	$352.645	$256.196	$346.527	$377.130	$439.918	$427.010	$0.000	$10,962.849
Unit Cost ($M)	$1.970		$1.249	$1.008	$0.874	$0.827	$0.869	$0.907	$1.007	$0.000	$1.570

Description:
Tomahawk provides an attack capability against targets on land (Tomahawk Land Attack Missile (TLAM)), and can be launched from both surface ships (RGM) and submarines (UGM).

Tomahawk consists of the following variants: (1) UGM -109A, Land Attack Nuclear; (2) RGM/UGM-109B, Antiship; (3) RGM/UGM-109C, Land Attack Conventional; (4) RGM/UGM-109D, Land Attack Submunition Dispenser; (5) RGM/UGM-109E, Tactical Tomahawk. The Land Attack Anti-ship Surface Launch Nuclear versions are no longer in Fleet use. The land-attack version in the Fleet is used for precision destruction of targets at long range.

Production of the Tactical Tomahawk missile began with Low Rate Initial Production (LRIP) buys of 25 in FY2002 and 350 in FY2003. Full rate production commences in FY2004. FY2004-FY2008 unit cost based on approval of multi-year procurement (MYP). The contractor's production offer of $569 (FY99$) level unit price, plus Government incentives and award fees are factored into the multi-year pricing. The FY04 Authorization and Appropriations Act authorized the Navy to pursue a MYP contract. If MYP is not approved, additional funds will be required to maintain procurement quantity. FY2004 EOQ supports economic order quantity procurements for the MYP.

Characteristics and dimensions (approximate)
Weight (with booster and capsule) (UGM-109): 4,300 pounds
Weight (with booster and canister) (RGM-109): 4,000 pounds
Length (with booster): 20.5 feet
Wing Span: 8.6 feet
Cruise Speed: High Subsonic

Contractor: Raytheon Missiles Systems Company

FY2003 Iraq Freedom Fund (IFF) - $193 million, replaces 183 missiles expended in OIF.
FY2002 Defense Emergency Response Fund (DERF) - $350 million, 454 missiles remanufactured to the Block III configuration.

WEAPONS PROCUREMENT, NAVY
FY 2005 DEPARTMENT OF THE NAVY BUDGET
MISSILE COST ANALYSIS
EXHIBIT P-5
(Dollars in Thousands)

Missile Nomenclature & Popular Name: TOMAHAWK (J2EL)(PEO(W)) (BLI: 210100) (MYP) Date: February 2004

Cost Elements	Prior Years Total Cost	FY 2003 Quantity	FY 2003 Unit Cost	FY 2003 Total Cost	FY 2004 Quantity	FY 2004 Unit Cost	FY 2004 Total Cost	FY 2005 Quantity	FY 2005 Unit Cost	FY 2005 Total Cost
Missile Hardware										
Previous Tomahawk Production	5,611,035									
Tactical Tomahawk	35,298	350	1,077	376,950	350	652	228,305	293	663	194,113
Remanufacture (Block III)	592,217									
Subtotal Hardware	6,238,550	350		376,950	350		228,305	293		194,113
Non-Recurrring Tooling	24,500			13,590						
Other Hardware*										
CCLS Submarine Capsules	962	113	199	22,470	125	233	29,124	97	282	27,306
Canisters	846	237	62	14,792	225	87	19,486	196	90	17,628
Subtotal Other Hardware	1,808	350		37,262	350		48,610	293		44,934
Production Support										
Product Improvement	378,947									
Systems Engineering	283,203			3,841			10,682			10,849
Production Engineering	608,057			3,694			10,272			10,432
Subtotal Production Support	1,270,207			7,535			20,954			21,281
Total Flyaway Cost	7,535,065			435,337			297,869			260,328
Other Support Costs										
Theater Mission Planning Center	255,044									
Support Equipment	114,354			584			1,624			1,649
Training Equipment	79,420			824			2,292			2,328
Documentation	28,968			309			860			873
Subtotal Other Support Costs	477,786			1,717			4,776			4,850
Total Support Costs	477,786			1,717			4,776			4,850
Gross P-1	8,012,851			437,054			302,645			265,178
EOQ Credit										-8,982
Net P-1	8,012,851			437,054			302,645			256,196
EOQ							50,000			
Weapon Systems Cost	8,012,851			437,054			352,645			256,196
Initial Spares	313,518									
Total Program Cost	8,326,369		1,249	437,054		1,008	352,645		874	256,196
Non Add: FY 2002 DERF										
Tomahawk Remanufacture	350,000									

*The unit cost for Canisters and Capsules is derived from the most economical combination of used (refurbished), upgraded, and new Canisters and Capsules.

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System: TOMAHAWK	A. DATE: February 2004
B. APPROPRIATION/BUDGET ACTIVITY: Weapons Procurement, Navy; BA2/Other Missiles	C. P-1 ITEM NOMENCLATURE: Tomahawk (PEO(W)) (BLI: 210100) (MYP)	SUBHEAD: J2EL

COST ELEMENT/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
TACTOM All-Up-Round										
01000/FY02	25	1,412	NAVAIR	Jun 01	SS/FPI	Raytheon Missile Systems Co., Tucson, AZ	Oct 02	May 04	YES	N/A
01000/FY03	167	1'250	NAVAIR	Jun 01	SS/FPI	Raytheon Missile	Jan 03	Oct 04	YES	N/A
01000/FY03	183	920	NAVAIR	Nov 03	SS/FP	Raytheon Missile Systems Co., Tucson, AZ	Jan 04	Sep 05	YES	N/A
01000/FY04*	350	653	NAVAIR	Jul 03	SS/FP (MYP)	Raytheon Missile Systems Co., Tucson, AZ	Jun 04	Jan 06	YES	N/A
01000/FY04 for FY05-FY08 EOQ			NAVAIR	Jul 03	AAC/MYP	Raytheon Missile Systems Co, Tucson, AZ	Jun 04		YES	N/A
01000/FY05*	293	664	NAVAIR	Jul 03	SS/FP (MYP)	Raytheon Missile Systems Co., Tucson, AZ	Jun 04	Nov 06	YES	N/A
TLAM REMAN										
FY 2002 DERF	454	771	NAVAIR	Dec 01	SS/FP	Raytheon Missile Systems Co., Tucson, AZ	Dec 01	Aug 03	YES	N/A

D. Remarks: *Quantity based upon Tactical Tomahawk Multi-year Procurement in FY2004-FY2008.

FY 2004/2005 DEPARTMENT OF THE NAVY BUDGET PRODUCTION SCHEDULE, P-21			DATE	February 2004
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy**		Weapon System **TOMAHAWK**	P-1 ITEM NOMENCLATURE **Tomahawk (PEO(W))(BLI: 210100) (MYP)**	

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
Tactical Tomahawk (FY04)	Raytheon Missiles Systems Co.									
	Tucson, AZ	N/A	24	42	7	9	16		32	Each

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003										BAL
						2001	CALENDAR YEAR 2002												CALENDAR YEAR 2003										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Block IV Tomahawk (TACTOM)	2002		25	0	25													A										25
Block IV Tomahawk (TACTOM)	2003		167	0	167																A							167
*FY02-Remanufacture of Existing TLAM	DERF		454	0	454			A											1	4	5	11	17	17	20	26	40	39	43	231
Missiles into Block III Config																													

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2004												FISCAL YEAR 2005										BAL
						2003	CALENDAR YEAR 2004												CALENDAR YEAR 2005										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Block IV Tomahawk (TACTOM)	2002		25	0	25								2	3	4	4	4	4	4										0
Block IV Tomahawk (TACTOM)	2003		167	0	167													3	5	10	12	14	17	19	19	21	23	24		0
Block IV Tomahawk (TACTOM)	2003		183	0	183				A																			38	145
*FY02-Remanufacture of Existing TLAM	DERF		454	223	231	46	31	32						10	37	32	23	20												0
Missiles into Block III Config																													
Block IV Tomahawk (TACTOM)	2004		350	0	350									A															350
Block IV Tomahawk (TACTOM)	2005		293	0	293									A															293

Remarks: *Non Add: FY 2002 Defense Emergency Response Funding (DERF). REMAN contract incentivizes early delivery. Actual deliveries to date are annotated along with the remaining contracted delivery schedule.

FY 2004/2005 DEPARTMENT OF THE NAVY BUDGET PRODUCTION SCHEDULE, P-21						DATE February 2004	
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy**				Weapon System **TOMAHAWK**		P-1 ITEM NOMENCLATURE **Tomahawk (PEO(W))(BLI: 210100) (MYP)**	
		Production Rate			Procurement Leadtimes		
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
Tactical Tomahawk (FY04)	Raytheon Missiles Systems Co.									
	Tucson, AZ	N/A	24	42	7	9	16		32	Each

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2006												FISCAL YEAR 2007										BAL
						2005	CALENDAR YEAR 2006												CALENDAR YEAR 2007										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Block IV Tomahawk (TACTOM)	2003		183	38	145	38	38	38	31																			0
Block IV Tomahawk (TACTOM)	2004		350	0	350				7	38	38	38	38	38	38	38	38	38	1										0
Block IV Tomahawk (TACTOM)	2005		293	0	293														37	38	38	38	38	38	38	28			0

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2008												FISCAL YEAR 2009										BAL
						2007	CALENDAR YEAR 2008												CALENDAR YEAR 2009										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Remarks:

Exhibit MYP-1, Multiyear Procurement Criteria
Program: Tactical Tomahawk

1. Multiyear Procurement Description:

This proposed multiyear procurement (MYP) covers the purchase of 1981 Block IV Tactical Tomahawk missiles in FY 2004 through FY 2008 under a single five-year fixed-price contract. These missiles constitute the first five years of Full Rate Production (FRP) of Tactical Tomahawk, following two years of Low Rate Initial Production (LRIP) in FY 2002 and FY 2003, during which 192 Tactical Tomahawk missiles will be produced. An additional LRIP has been funded via the FY2003 Supplemental Appropriations, and will procure an estimated 183 missiles prior to the beginning of the MYP in FY2004. This MYP strategy has been structured to achieve significant savings while providing increased operational responsiveness, flexibility and reliability.

The MYP up front investment costs for non-recurring start-up expenses were funded in FY 2002 and FY 2003 as part of the LRIP effort to support planned FRP in FY 2004. Advanced procurement in the amount of $50M is provided as part of the FY 2004 budget to cover economic order quantities. As compared to annualized procurements, this multiyear procurement will achieve $133M of savings over the five-year period. This is equivalent to 9.0% of the total annualized cost to procure the same quantity.

The MYP contract will set a target quantity for each fiscal year of the contract, but allow for a quantity range of missiles in each fiscal year to allow the Government the flexibility to meet emergent requirements for more missiles, including those for foreign military sales customers, while maintaining the MYP and the savings established in the baseline. This flexibility can also accommodate a range of missile deletions without forgoing MYP benefits, but deletions may erode some of the overall savings due to a reduction in economies of scale and the amortization of non-recurring efforts, which will have already occurred.

2. Benefits to the Government:

a. Substantial Savings:

Implementation of this MYP will yield significant opportunity for cost avoidance through the five-year term of this contract. The total cost savings/avoidance for FY 2004 through FY 2008 associated with this contract are estimated to be $133M (TY$). The cost savings will be generated as a result of Economic Order Quantity (EOQ) and investment in program specific capital equipment and/or processes that would not meet the contractor's Internal Rate of Return objectives under annualized procurements. Some examples include:

Williams International will level-load procurement of cruise missile engine components, such as the start cartridges and pyro igniters, which will allow for the development of a sustainable, efficient production flow process, including the optimization of component acceptance testing, at all tiers of the engine supply chain.

Economic Order Quantity purchases of rocket motor sub-components such as the arm fire device, nozzle throat components, motor casing forgings and the Satellite Data Link Transceiver Viastat.

Administrative costs will be reduced due to there being one proposal, negotiation and contract award process instead of five consecutive single-year contracting actions. Cost reductions will also be realized since the prime contractor can enter into one five-year contract with its subcontractors, at all tiers, instead of five separate actions. The prime contractor will also experience administrative cost reductions in the production planning processes since they will only be required to perform that process once, instead of five times under an annual contracting scenario.

Additionally, given a five-year contract, suppliers will have a greater total business base and stability than would otherwise be the case. As such, they will have added incentive and more opportunity to identify innovative processes and justify capital investments necessary to reduce costs.

b. Stability of Requirement:

The requirement for the Block IV Tactical Tomahawk All Up Round is based on the Tomahawk Baseline IV Operational Requirements Document (ORD) approved 1 Feb 00. The ORD has been updated to reflect the evolution of operational requirements including increased system flexibility to support receipt of missile/mission status, enroute retargeting of the missile to alternate preplanned and preloaded aimpoints or missions via third party command, reduced system response time to enable engagement of emerging and relocatable targets, and improved lethality against a wider target set. The Key Performance Parameters identified in the ORD have remained stable from program inception and are anticipated to remain stable through the production period. These performance parameters have been flowed down and in some areas enhanced in the missile level specification required under the development and production contracts.

As a critical first strike weapon, Tactical Tomahawk production is of operational significance to the Fleet Commanders, who consistently list Tomahawk inventory as one of their top fleet issues. The planned Tactical Tomahawk program contained in the budget will significantly improve inventory posture, a task which has become more critical after Operations Enduring Freedom and Iraqi Freedom where significant numbers of Tomahawks were expended in combat. The currently fielded Block III missile went out of production in 1998, and through emergency supplemental funds in FY99 and FY02, all remaining Block II and some older TASM and Surface-N missiles will be remanufactured to Block III capability. Only 304 of the older TASM and Surface-N missiles remain as potential remanufacture candidates, and these represent the least economically feasible pool for remanufacture. Block IV Tactical Tomahawk production is the best candidate for increasing the inventory of Tomahawk Missiles and will provide more capability at a quicker rate than another Reman program could.

c. Stability of Funding:

The Navy has demonstrated its commitment to a stable funding stream for the Tactical Tomahawk multiyear through every step of the PPBS process. The use of Tomahawk in recent operations has further reduced the inventory of Tomahawk assets to support future, deep-strike, land attack missions. Congress has expressed the desire to enter Tactical Tomahawk production at the earliest opportunity by providing additional funding in FY02 (Congressional Add) for the procurement of non-recurring engineering/special tooling and test equipment to realize Full Rate Production levels as soon as possible and increasing FY04 appropriation to $352.645M (including congressional undistributed adjustments) for 350 missiles. In addition, the Navy provided funding in FY03 for the remaining non-recurring costs.

d. Stable Design:

The Tactical Tomahawk has undergone a five-year Engineering & Manufacturing Development (E&MD) phase. This phase included significant component level testing, AUR level qualification testing, system level integration testing, Functional Ground Tests and two Contractor Development Test Flights (DT-0 and DT-1) of the All-Up-Round. The DT-0 test flight was successfully conducted in Aug 02, and the DT-1 test flight was successfully conducted in Nov 02. Both test flights demonstrated and met all required test objectives. The technical success and design maturity demonstrated by the DT-0 and DT-1 tests allowed for the initiation of the Low-Rate Initial Production I (LRIP-I) program in Oct 02 and the LRIP-2 option award in Jan 03, respectively. The Tactical Tomahawk AUR is meeting and in most areas exceeding its design performance requirements.

All four TECHEVAL shots, including two live warhead shots, were flown in FY2003 and each successfully met all test objectives. The program has completed all Government Technical Evaluation (TECHEVAL) events and has entered Operational Evaluation Testing. Operational Evaluation (OPEVAL) testing will complete in 2nd quarter FY04 followed by Initial Operational Capability (IOC). The FRP decision, Milestone III, is scheduled for 3rd quarter of FY04 with the multiyear procurement contract to be awarded immediately following.

In conclusion, Tactical Tomahawk has completed its design development and is meeting and exceeding all design performance requirements. Government testing activities will provide the final design interface verification assessment to ensure that the complete weapon system design configuration is stable prior to commencement of full rate production. The contractor's technical success, production and experience from prior Block Tomahawks, and the substantial knowledge gained over the Tactical Tomahawk's test program, provide for a technically mature design with which to enter into a MYP.

e. Realistic Cost Estimate:

The Program Office in conjunction with the contractor, the NAVAIR Cost Analysis group (AIR-4.2), and NAVAIR contracts (AIR-2.4) has participated in the formulation of a Common Cost Model. The Navy Center for Cost Analysis had an advisory position on this team. The Common Cost Model is based upon estimated costs to the Prime contractor based on invoices, purchase orders, sub-contractor proposed prices, and the material and labor costs from LRIP. This model was used to derive both projected Multi-year and Annualized costs by accounting for differences in sub-contractor proposals for multi-year versus stand-alone contracts. In addition to this Common Cost Model, NCCA formulated a projected unit cost based on parametric analysis. The estimated unit cost for Tactical Tomahawk in FRP based on the Common Cost Model is within the range predicted by NCCA.

f. National Security:

The Quadrennial Defense Review, Defense Planning Guidance and Navy Non Nuclear Ordinance Requirement have set the requirements for Tomahawk significantly above current inventory levels. In support of National Security requirements and future objectives, the establishment of a sustaining industrial base with surge capability for this critical first strike weapon is essential in supporting the National Military Strategy.

3. Source of Savings:

	$ in Millions
Inflation	2.99
Vendor Procurement	63.64
Manufacturing	45.35
Other	20.83
Total	132.81

4. Advantages of the MYP

This MYP strategy has been structured to achieve significant savings ($133M) over annualized procurements. The MYP strategy is also planned to allow a quantity range of missiles in each FY, allowing the Government the flexibility to meet emergent requirements for more missiles, potentially including that for foreign military sales customers, while maintaining the MYP and the savings already established in the baseline. This flexibility can also yield missile deletions without forgoing MYP benefits, but this may erode some of the overall savings due to a reduction in economies of scale and the amortization of non-recurring efforts, which will have already occurred.

5. Impact on Industrial Base:

Implementation of this MYP will also yield a favorable impact on the industrial base. The stability afforded by the use of a MYP will allow the prime contractor to enter into long term agreements with subcontractors and suppliers, at every tier, which will provide substantial cost avoidance. Such long term agreements incentivize both the prime and subcontractors to invest in process improvements such as those cited above, thereby yielding long term benefits in terms of product quality and cost. The stability of the prime multiyear contract will also foster improved competition at the subcontractor level, as the offer of a longer term business arrangement will encourage more aggressive pursuit of a contract award. The contractor and subcontractors will face reduced risk when implementing production process improvements, facility improvements, tooling design improvements, and fabrication process improvements. The ability for the Government and industry to enter into a long term agreement will allow industry the opportunity to place capital investments upfront, which reduces the overall cost and improves the quality of the Tactical Tomahawk missile.

6. Multiyear Procurement Summary: ($M)

	Annual Contracts	MYP Alternate
Quantity	1,981	1,981
Total Contract Price	$1,476.7	$1,343.9
Cancellation Ceiling (highest point)		
Funded		
Unfunded		$17.4
$ Cost Avoidance Over Annual		$132.8
% Cost Avoidance Over Annual		9.0%

Exhibit MYP-2, Total Program Funding Plan					Date							
					February 2004							
Appropriation/Budget Activity					P-1 Line Item Nomenclature							
Weapons Procurement Navy/BA-2 Other Missiles					TOMAHAWK (J2EL)(PEO(W))(BLI:210200)							
	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	Total
Procurement Quantity				350	293	419	434	485			1981
Annual Procurement											
Gross Cost				342299	292374	383155	412825	474579			1905232
Less PY Adv Procurement				-	-	-	-	-			-
Net Procurement (=P-1)				342299	292374	383155	412825	474579			1905232
Plus CY Adv Procurement				-	-	-	-	-			-
Weapon System Cost				342299	292374	383155	412825	474579			1905232
Multiyear Procurement											
Gross Cost (P-1)				302645	265178	359372	390435	454786			1772416
Less PY Adv Procurement				-	-8982	-12845	-13305	-14868			-50000
Net Procurement (=P-1)				302645	256196	346527	377130	439918			1722416
Advance Procurement											
For FY 2004				-	-	-	-	-			
For FY 2005				8982	-	-	-	-			8982
For FY 2006				12845	-	-	-	-			12845
For FY 2007				13305	-	-	-	-			13305
For FY 2008				14868	-	-	-	-			14868
Total Adv Procurement				50000	-	-	-	-			50000
Weapon System Cost				352645	256196	346527	377130	439918			1772416
Multiyear Savings ($)				-10346	36178	36628	35695	34661			132816
Cancellation Ceiling - Funded											
Cancellation Ceiling - Unfunded				15686	17353	16335	10950				
OUTLAYS											
Annual				21778	229006	340838	355003	411457	359248	187902	1905232
Multiyear				27733	206610	310908	341834	378143	330048	177140	1772416
Savings				-5955	22396	29930	13169	33314	29200	10762	132816

Remarks

Exhibit MYP-3, Contract Funding Plan					Date							
					February 2004							
Appropriation/Budget Activity					P-1 Line Item Nomenclature							
Weapons Procurement Navy/BA-2 Other Missiles					TOMAHAWK (J2EL)(PEO(W))(BLI:210200)							
	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	Total
Procurement Quantity				350	293	419	434	485			1981
Annual Procurement											
Gross Cost				267959	221309	306650	320982	359778			1476678
Less PY Adv Procurement				-	-	-	-	-			-
Net Procurement (=P-1)				267959	221309	306650	320982	359778			1476678
Plus CY Adv Procurement				-	-	-	-	-			-
Contract Price				267959	221309	306650	320982	359778			1476678
Multiyear Procurement											
Gross Cost (P-1)				228305	194113	282867	298592	339985			1343862
Less PY Adv Procurement				-	-8982	-12845	-13305	-14868			-50000
Net Procurement (=P-1)				228305	185131	270022	285287	325117			1293862
Advance Procurement											
For FY 2004				-	-	-	-	-			
For FY 2005				8982	-	-	-	-			8982
For FY 2006				12845	-	-	-	-			12845
For FY 2007				13305	-	-	-	-			13305
For FY 2008				14868	-	-	-	-			14868
Total Adv Procurement				50000	-	-	-	-			50000
Contract Price				278305	185131	270022	285287	325117			1343862
Multiyear Savings ($)				-10346	36178	36628	35695	34661			132816
Multiyear Savings (%)											9.0%
Cancellation Ceiling - Funded											
Cancellation Ceiling - Unfunded				15686	17353	16335	10950				
OUTLAYS											
Annual				2227	185040	284289	282703	323005	287708	111706	1476678
Multiyear				8182	162644	254359	269534	289691	258508	100944	1343862
Savings				-5955	22396	29930	13169	33314	29200	10762	132816

Remarks

Exhibit MYP-4, Present Value Analysis					Date						
					February 2004						
Appropriation/Budget Activity Weapons Procurement Navy/BA-2 Other Missiles					P-1 Line Item Nomenclature TOMAHAWK (J2EL)(PEO(W))(BLI:210200)						
	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	Total
Annual Proposal											
Then Year Cost				2,227.000	185,040.000	284,289.000	282,703.000	323,005.000	287,708.000	111,706.000	1,476,678.000
Constant Year Cost				2,262.000	187,376.000	285,188.000	277,739.000	311,736.000	273,702.000	105,568.000	1,443,571.000
Present Value				2,290.000	185,077.000	274,818.000	261,112.000	285,926.000	244,918.000	92,162.000	1,346,303.000
Multiyear Procurement											
Then Year Cost				8,182.000	162,644.000	254,359.000	269,534.000	289,691.000	258,508.000	100,944.000	1,343,862.000
Constant Year Cost				8,311.000	164,722.000	255,294.000	265,512.000	279,681.000	245,907.000	95,397.000	1,314,824.000
Present Value				8,414.000	162,701.000	246,011.000	249,617.000	256,525.000	220,046.000	83,283.000	1,226,597.000
Difference											
Then Year Cost				-5,955.000	22,396.000	29,930.000	13,169.000	33,314.000	29,200.000	10,762.000	132,816.000
Constant Year Cost				-6,049.000	22,654.000	29,894.000	12,227.000	32,055.000	27,795.000	10,171.000	128,747.000
Present Value				-6,124.000	22,376.000	28,807.000	11,495.000	29,401.000	24,872.000	8,879.000	119,706.000

Remarks

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy**							P-1 ITEM NOMENCLATURE **Tomahawk EOQ (MYP)**					
Program Element for Code B Items: **BA2/Other Missiles P.E. #0204229N**							Other Related Program Elements					
	Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
COST (In Millions)		**B**			**$50.000**							**$50.000**

MISSION AND DESCRIPTION:

Tomahawk provides an attack capability against targets on land (Tomahawk Land Attack Missile (TLAM)), and can be launched from both surface ships (RGM) and submarines (UGM).

Tomahawk consists of the following variants: (1) UGM -109A, Land Attack Nuclear; (2) RGM/UGM-109B, Antiship; (3) RGM/UGM-109C, Land Attack Conventional; (4) RGM/UGM-109D, Land Attack Submunition Dispenser; (5) RGM/UGM-109E, Tactical Tomahawk. The Land Attack Anti-ship Surface Launch Nuclear versions are no longer in Fleet use. The land-attack version in the Fleet is used for precision destruction of targets at long range.

Production of the Tactical Tomahawk missile began with Low Rate Initial Production (LRIP) buys of 25 in FY2002 and 167 in FY2003. Full rate production will commence in FY2004. FY2004-FY2008 unit cost based on approval of multi-year procurement (MYP). FY2004 is the only year that includes advanced procurement funding for the Multi-Year Procurement (MYP) contract. The amount includes Economic Order Quantity (EOQ) requirements to support the MYP contract.

Exhibit P-10 Advance Procurement Requirements Analysis **(Page 1 - Funding)**							Date: **February 2004**						
Appropriation (Treas) Code/CC/BA/BSA/Item Control Number **Weapons Procurement, Navy/BA-2, Other Missiles**							P-1 Line Item Nomenclature **Tomahawk EOQ (MYP)**						
Weapon System **Tomahawk**					First System (BY1) Award Date **June 2004**				Interval Between Systems **Avg 9 Missiles Per Week**				
($ in Millions)													
	PLT	When Rqd	Prior Years	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	To Complete	Total
Tactical Tomahawk Qty						350	293	419	434	485			1981
EOQ													
FOR FY2005						9.0							9.0
FOR FY2006						12.8							12.8
FOR FY2007						13.3							13.3
FOR FY2008						14.9							14.9
Total AP			0	0	0	50.0	0	0	0	0	0	0	50.0

Description:

This line item funds EOQ requirements for the FY2004 through FY2008 MYP Tomahawk program.

Exhibit P-10 Advance Procurement Requirements Analysis **(Page 2 - Budget Justification)**							Date: **February 2004**		
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number **Weapons Procurement, Navy/BA-2, Other Missiles**					Weapon System **Tomahawk**		P-1 Line Item Nomenclature **Tomahawk EOQ (MYP)**		
(TOA, $ in Millions)									
	CY PLT	QPA	Unit Cost	FY 2003 for FY 2004 Qty	FY 2003 Contract Forecast Date	FY 2003 Total Cost Request	FY 2004 for FY 2005 Qty	FY 2004 Contract Forecast Date	FY 2004 Total Cost Request
End Item									
Tactical Tomahawk EOQ							VAR	Jun-04	50.0
Total Advance Proc						0.0			50.0

Description:

P-1 Shopping List Item No. Exhibit P-10, Advance Procurement Funding